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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/591,494	09/01/2006	Tsutomu Yamaguchi	056272.58171US	1869

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CROWELL & MORING LLP
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EXAMINER

QIN, JIANCHUN

ART UNIT	PAPER NUMBER
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2837

MAIL DATE	DELIVERY MODE
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12/26/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/591,494

Applicant(s)

YAMAGUCHI, TSUTOMU

Examiner

Jianchun Qin

Art Unit

2837

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 September 2006 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>9/1/06</u> | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshikawa et al. (U.S. Pat. No. 5559297) in view of Oshima (JP62158757A).

Regarding claim 1, Yoshikawa et al. disclose a key (Fig. 1) for a keyboard-based musical instrument (Abstract; col. 1, lines 8-11) characterized by comprising: a key body (11); and a key touch member (12) disposed on the top of said key body (Figs. 1 and 2), made of a perspiration-absorbing material, and for touching the key (col. 2, lines 9-21).

Yoshikawa et al. do not mention expressly: said key touch member is made of a first synthetic resin having a hydrophilic polymer added thereto.

Oshima discloses a key for a keyboard-based musical instrument, wherein the key is made of a first synthetic resin having a hydrophilic polymer added thereto (Abstract).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Yoshikawa et al. to include a key touch member made of a first synthetic resin having a hydrophilic polymer added thereto, as taught by Oshima, such that the key touch member not only has water-absorbing

properties but also is good to the touch; and further, production can be efficiently conducted (Oshima, Abstract).

Regarding claim 2, Yoshikawa et al. do not mention expressly: said first synthetic resin is one of an acrylonitrile butadiene styrene resin, an acrylonitrile-styrene resin, and an acrylic resin.

Yoshikawa et al. disclose: said key body is made of an acrylonitrile butadiene styrene (ABS) resin (col. 2, lines 9-21).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combination of Yoshikawa et al. and Oshima to use ABS resin as the first synthetic resin such that production of the key touch member can be efficiently conducted (Oshima, Abstract).

Regarding claim 3, Yoshikawa et al. disclose: said key body is made of ABS resin without the hydrophilic polymer added thereto, and said key touch member is adhered to said key body (Figs. 1-2; col. 2, lines 9-21).

Regarding claim 4, Yoshikawa et al. do not mention expressly: said key body is made of one of said first synthetic resin having the hydrophilic polymer added thereto and a second synthetic resin without the hydrophilic polymer added thereto, and is integrally molded with said key touch member.

Oshima discloses: a key body is made of a first synthetic resin having the hydrophilic polymer added thereto, and is integrally molded with a key touch member (Abstract).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Yoshikawa et al. to make a key, having a key touch member integrally molded with the key body, made of a first synthetic resin having a hydrophilic polymer added thereto, as taught by Oshima, such that the key not only has water-absorbing properties but also is good to the touch, and further, production can be efficiently conducted (Oshima, Abstract).

Contact Information

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jianchun Qin whose telephone number is (571) 272-5981. The examiner can normally be reached on 8am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lincoln Donovan can be reached on (571) 272-1988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

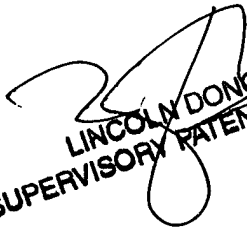
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USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jianchun Qin
Examiner
Art Unit 2837

JQ


LINCOLN DONOVAN
SUPERVISORY PATENT EXAMINER